FA 49 course

Update to the ORSA Advisory Committee

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Purpose

To inform the ORSA Advisory Committee about feedback from the FY 04 FA 49 Qualification Course and provide recommendations for future iterations of the course.

Agenda

- Q-Course Overview and Background.
- Feedback Mechanisms.
- Feedback and Assessment.
- Recommendations.
- Issues.

Mandates and Goals

Fill educational void by preparing officers to apply business practices, tools, and methodologies during their 10-20th years of service as senior analysts on Army and Joint staffs.

Mandate: “Keep the ‘O’ in Operations Research.”
-- Proponent and ORSA Advisory Committee

Q-Course Goals

Prepares Officers:

- For supervisory positions on senior staff.
- To establish analytical requirements.
- To design and lead studies.
- To establish appropriate methodologies.
- To guide and review analytic work.
- To apply ORSA techniques to a wide range of military issues.

FY 04 Curriculum Changes

Course Module	Changes	Rationale
Studies	▪ More closely coupled to Capstone. ▪ Integration of multiple PEs w/Capstone. ▪ Increased emphasis on joint context. ▪ Increased costing activities. ▪ Integration of study leadership.	▪ Student feedback. ▪ Faculty observation. ▪ Leader input. ▪ Quality Assurance visit. **Innovation is the major driver for changes in delivery.**
The Role of Analysis	▪ TAA & Training content modified. ▪ Support to Current Ops added. ▪ Increased role of case studies.	
Operational Environment	▪ New operational case studies. ▪ Student led discussions. ▪ Pre-course background readings.	
Transformation	▪ Student led JOpsC presentations. ▪ Revised transformation analysis. ▪ Increased joint emphasis.	

FY 03: Guided discussions, followed by practical exercises. Case studies used to engage guest lecturers with students.

FY 04: Case studies integrate lessons/modules, increase joint emphasis. More student led topics. Practical exercises are capstone enablers. Contact time – less is more.

FA 49 Q-Course Curriculum – FY 04

FA 49 course

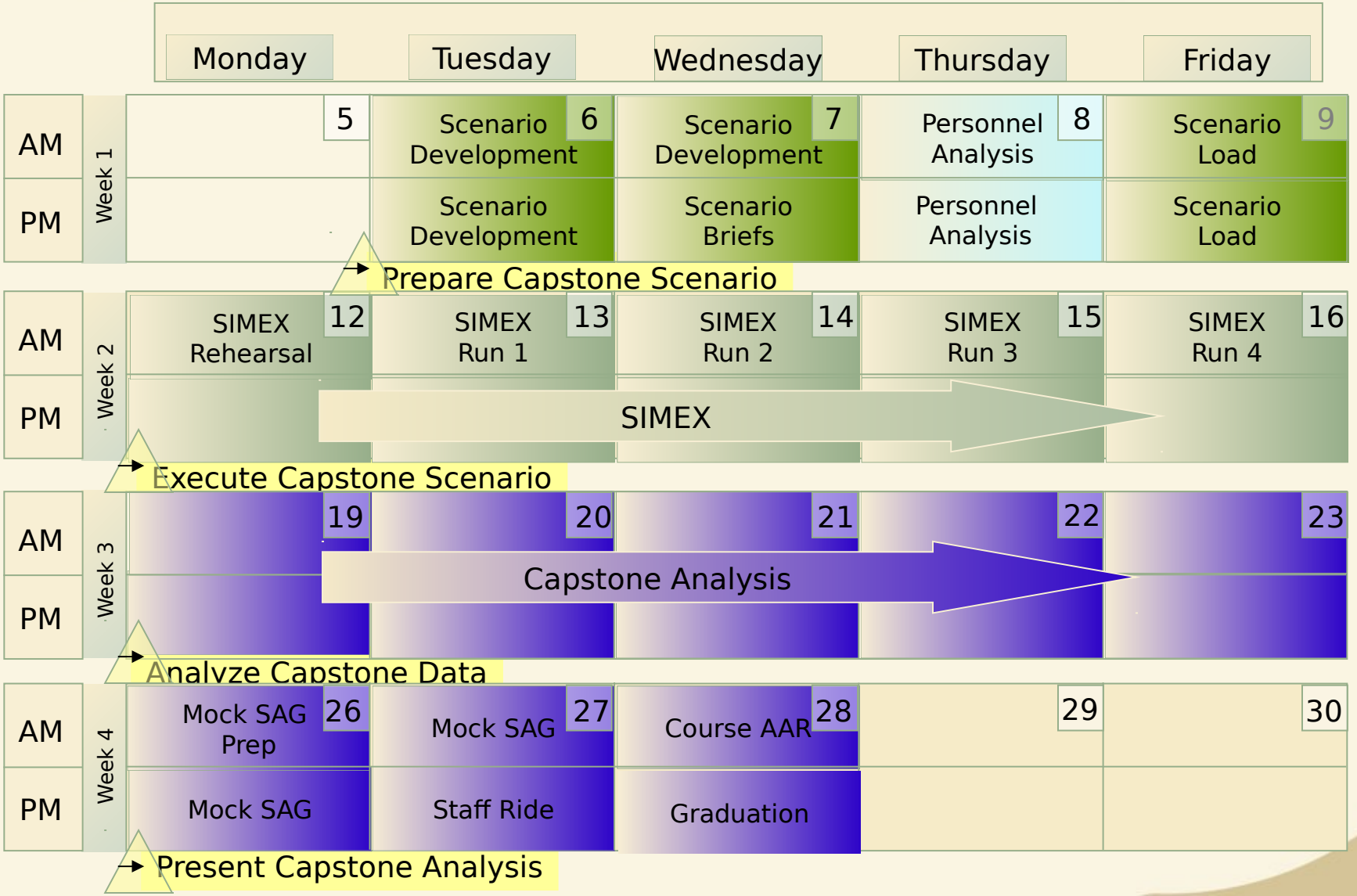
Threads of Continuity

Course Module	Day	Curriculum Content
Studies	9.0 Days	Types & Impact of Army studies, Problem Formulation, M&S, Analysis Plan Development, Scenario Development, Analysis Communication, Analysis Leadership
The Role of Analysis	5.0 Days	PA&E, Test and Evaluation, Force Development Analysis, Personnel Analysis, Sister Services, Joint Analysis, Support to Combat Operations
Operational Environment	2.5 Days	World Trends, Current Threat, Operational Environment
Transformation	6.0 Days	Joint Operational Concepts, Army Transformation Campaign Plan, Current and Future Forces, Battle Command and C4ISR, Analysis Implications
Capstone Exercise	12.5 Days	End-to-end Exercise which integrates course content in a joint context. Introduced first week of course.

Course Calendar-June 2004

		Monday	Tuesday	Wednesday	Thursday	Friday
AM	Week 1	7 Inprocess/Welcome	8 Problem Formulation	9 World Trends & Globalization	10 ORSA Support to Combat Ops	11 Opposing Force Doctrine
PM	Week 1	ORSA History Types of Studies	Capstone	Operational Environment	Joint Analysis	Opposing Force Doctrine
			Capstone Topic Introduction			
AM	Week 2	14 Joint Operational Concepts	15 Army Transformation Campaign Plan	16 Future and Current Forces	17 Force Development Analysis	18 Transformation Analysis
PM	Week 2	Operational Case Study Briefs	Capstone	Study Leadership	Force Development Analysis	Transformation Analysis
			Issue Capstone Requirement			
AM	Week 3	21 Battle Command and C4ISR	22 Transformation Implications	23 Analysis Planning	24 Data	25 Models and Simulations
PM	Week 3	Battle Command and C4ISR	Capstone	Scenario Development	Analysis Execution	Improving Army ORSA Operations
				Develop Analysis Plan		
AM	Week 4	28 Analysis Communication	29 Analysis Plan Briefs	30 Program Analysis and Evaluation	1 Sister Services	2
PM	Week 4	Analysis Plan Development	Capstone	Army Test and Evaluation	Capstone	

Course Calendar-July 2004



Feedback Mechanisms

Robust data collection plan which includes:

- Students.
  - End of module surveys (complete).
  - End of course surveys (complete).
  - Course & Capstone AARs (complete).
  - Open and approachable faculty who encouraged student feedback.
  - Longitudinal data (complete).
- Faculty observations.
- Senior leader/guest lecturer observations.

Baseline Assumption:
Majors in ILE know what good training looks like,
but opinions vary between sources.

Pilot Course Class Profile

Rank	Last	First	Current Assignment	Next Assignment	Branch	SAT
MAJ	Dietrich	Nathan	TRAC-WMSR	CAA	IN	1
MAJ	Lenzini	Joshua	TRAC-Lee	Warrior Prep Cent	OD	1
MAJ	Gorak	Mark	USMA, ORCEN	MEPCOM	AV	1
GS13	Brink	Randy	ATEC	NA	NA	1
MAJ	Perez	Carlos	OCAR, RTD	NA	MI	2
MAJ	Dison	Trevor	TRAC-WMSR	NA	EN	2
MAJ	Emmons	Nelson	PACOM	NA	IN	2
Maj	Hallahan	Bill	HQ USMC	NA	IN	2
MAJ	Amhart	Lynette	FDIC, USAFAS	Ph.D. Candidate	AG	3
MAJ	Glover	Thomas	TRAC-FLVN	NA	AR	3
CPT	Macaraeg	Roy	Army G-1	NA	FA	3
MAJ	Schotzko	John	Army G-8	Army G-1	FA	3
GS13	Franklin	Shawn	AMSAA	NA	NA	3

- **Experienced, diverse class.**
  - 9 of 13 have multiple ORSA assignments – average 6 years experience.
  - 12 of 13 have completed masters – 1 working on masters.
  - Marine officer and GS13s brought new perspectives.

Overall Course Assessment – FY03/04

- Course is an unqualified success.
- Goals for the course remain valid.
  - Established by ORSA Advisory Committee – 2001.
  - Validated by PAT – 2002.
  - Consistent with independent needs analysis. – ILE office 2002.
  - Validated by student feedback – 2003/2004.
- Course content and delivery meets all established goals.
- Students value course content and educational experience.
- Contributions from the field are a tremendous strength.
- Capstone exercise and Mock SAG are highlights of course.
- Students valued the dedicated, experienced faculty.
- Course administration and execution mechanisms are well established.
- Well positioned for steady-state execution – FY 05.

Sources: **Student feedback, leader input, faculty observations.**

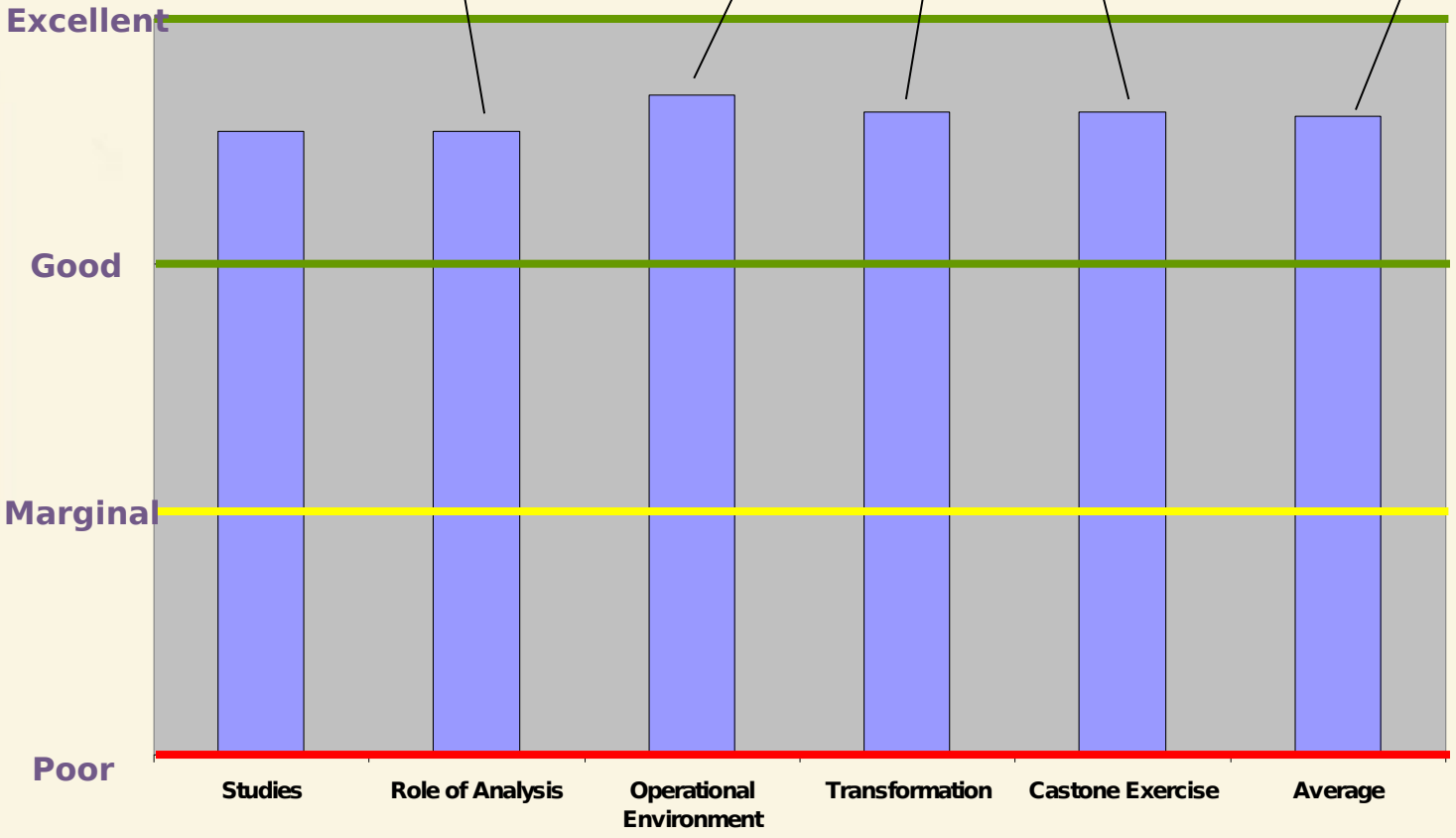
Value of Course Content – FY 04

Student Feedback – End of course survey.

Guest lecturers provided key content*.

Operational aspect of the course was highly valued by students*.

Course average shows overwhelming valuable content*.



* Consistent with FY 03 feedback.

Quality of Delivery – FY 04

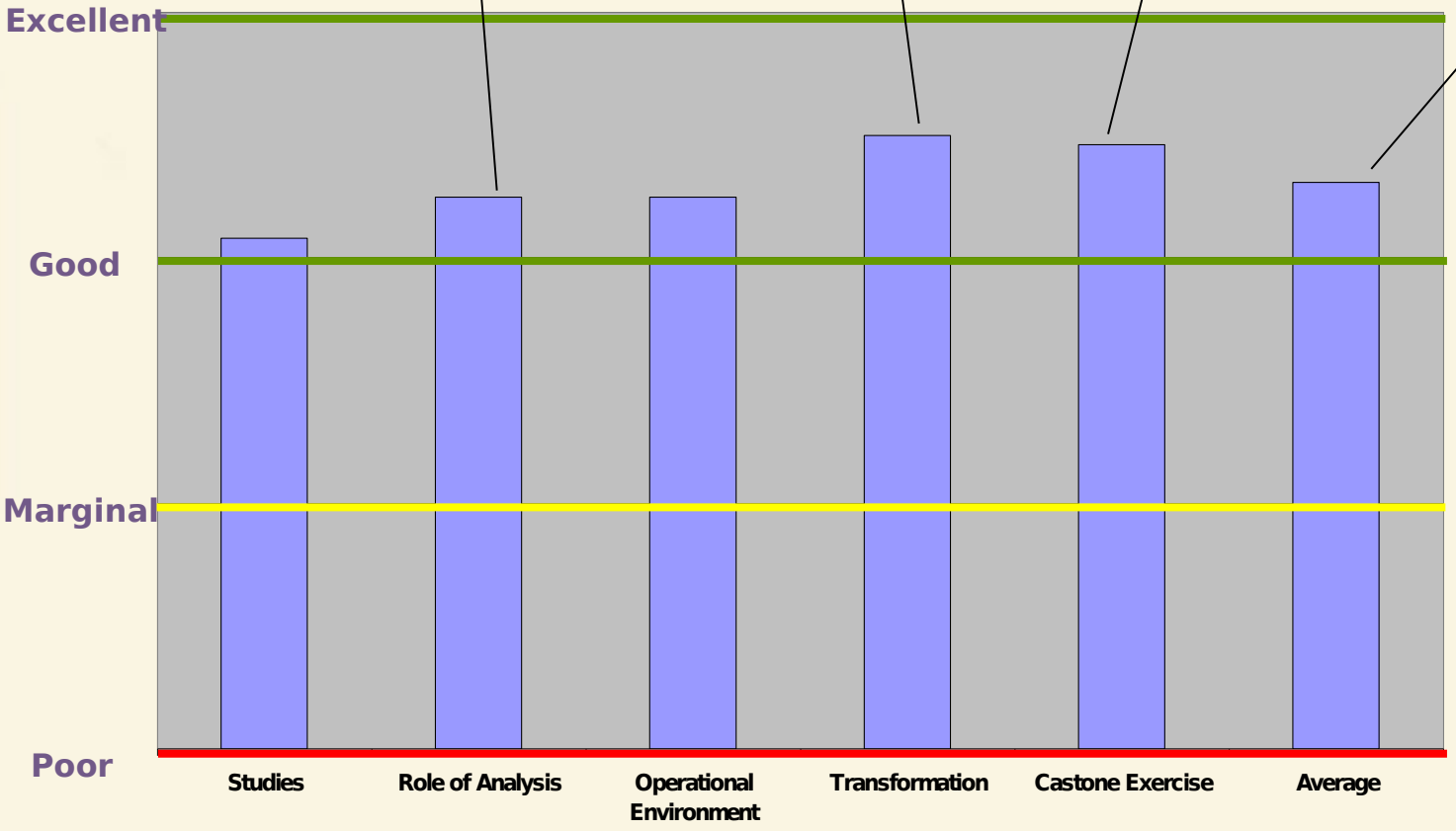
Student Feedback – End of course survey.

Guest lecturers professional and prepared.*

Current, relevant briefs by study leads were exceptional.

Capstone simulation and MOCK SAG well received.*

Solid execution of adult, experiential education.*



* Consistent with FY 03 feedback.

FY 04 Feedback Highlights

- All learning objectives met (student feedback).
- Capstone exercise remains a strength.
- Increased roll of case studies a two-edged sword.
  - Case studies were relevant and valuable.
  - Increased workload competed with Capstone.
- Guest lecturers from the field remain strength and risk.
- Execution of adult, experiential learning model is excellent.
- Witnessed growth in ability to communicate analysis.
- Cost analysis better, but not yet sufficient.

Sources: **Student feedback, leader input, faculty observations.**

Curriculum Recommendations

Changes/improve:

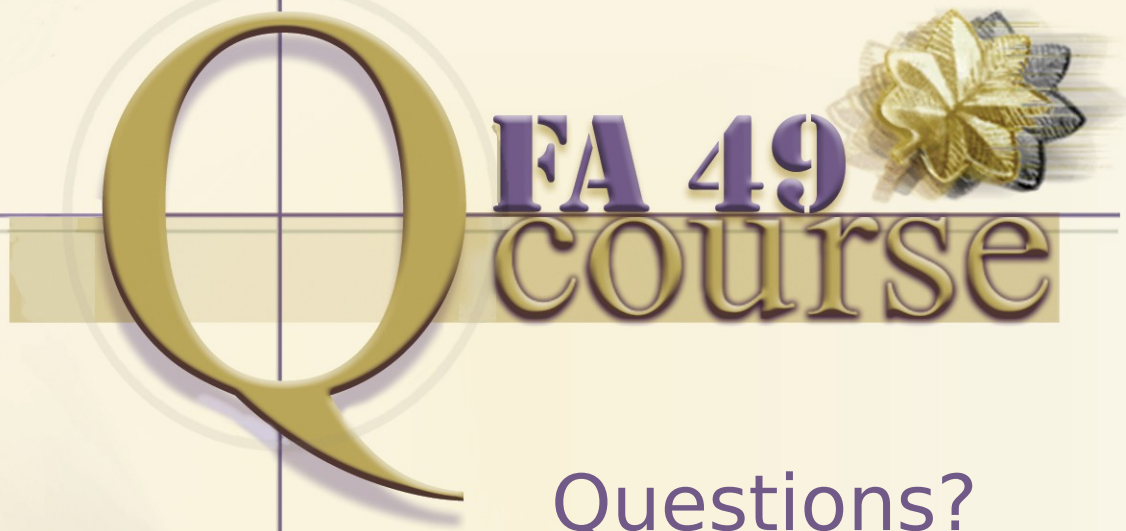
- Balance case studies and capstone timing.
  - Competing demands on students.
  - Resulted in divide and conquer dynamic.
- Student assessment vice student feedback.
  - Some students focus on assessments instead of growth/feedback.
  - Move to fewer assessed events (currently 15).
  - Assess events as pass/fail.
  - Feedback continuous, but not always associated with assessed events.
- Work with DASA-CE's office to improve cost analysis.

Keys to continued success:

- Experienced, knowledgeable faculty.
- Guest lecturer and case study support from the field.
  - The course must remain a product of the community, not any single organization.
- Retain operational topic for capstone exercise.
- Retain Mock SAG and senior leader involvement.
- Maintain curriculum annually – cannot pull last year's course off the shelf.

Issues/Discussion Topics

- FY 05 Contract and UFR.
- Attendance policy and mechanisms.
  - Steady-state target is YG 95.
  - No mechanism to force attendance, currently community handshake.
- Program director
  - TRAC currently does not have personnel available to fill position.
  - Requires a continuously engaged officer who becomes fully engaged May-July.



Questions?

Backup slides follow.

Adult Experiential Learning

FA 49 course

Characteristics

- Recognizes relevance of student's experiences.
- Classroom engagement is shaped by instructors with the intent to draw out relevant experiences.
- Ambiguous problems presented to the students.
- Students work in teams.
- Quality of educational experience is shared responsibility between instructors and students – requires student energy, experiences, and engagement.

Ambiguous problems presented to students:

- Force design capstone exercise.
- Case studies:
  - Mitigating Improvised Explosive Devices
  - Campaign assessment.
  - Program analysis and evaluation.
  - Test and evaluation of materiel solutions
  - U.S. Army recruiter mission allocation.
  - Market analysis for recruiting.
  - Troop transportation scheduling and cost analysis.

Over 230 hours per student working in a analysis team on ambiguous problems.

Capstone Exercise Concept

Students execute all phases of a typical Army analysis, from problem formulation through analysis reporting, either during events in the Capstone Exercise or in lessons integrated into other modules of the course.

Characteristics

- Five Events; Tasking, Scenario, SIMEX, Analysis, Mock SAG.
- Three Student Analysis Teams (SATs).
- Rotating SAT Leadership.
- Pertinent, Challenging Analysis Issue.
- Experiential Learning through Application.
- Time Constrained.
- A “Greening” Experience.

Assessed Events – FY 04

Module	Lesson	Assessment Event	Type	% of Total	Assessment Instrument
1 Studies	1	Letter: Problem Formulation	SAT	5%	CGSC Form 1009w
	2	Leadership: Capstone Event	Individual	10 %	Capstone Assessment Tool
	3	Briefing: Capstone Analysis Plan	SAT	10 %	CGSC Form 1009s
	4	Briefing: Capstone Scenario Modification	SAT	5%	CGSC Form 1009s
	6	Analysis: Capstone Analysis Execution	SAT	10 %	CGSC Form 1009s
	8	Briefing: Mock SAG**	SAT	15 %	Mock SA Assmt Tool
2 Role of Analysis	3	Case Study 1: IEDs During OIF	Group	4%	CGSC Form 1009s
	3	Case Study 2: Campaign Assessment	Group	4%	CGSC Form 1009s
	6	Case Study 3: Programming	Group	3%	CGSC Form 1009s
	7	Case Study 4: Land Warrior System	Group	3%	CGSC Form 1009s
	9	Case Study 5: Recruiter Mission Allocation	Group	Complete 1 of 3	CGSC Form 1009s
	9	Case Study 6: Hispanic Market Analysis	Group		
	9	Case Study 7: OIF R&R Scheduling	Group		
3 Operational Environment	2	Case Studies 1& 2 assessed in Module 2	Group	4%	CGSC Form 1009s
	2	Paper: Globalization Effects on ORSA	Individual	10 %	CGSC Form 1009w
4 Transformation	6	PE: Army Focus Areas	Group		CGSC Form 1009s
General	All	Briefing: “Brown Bag” Presentation	Individual	5%	CGSC Form 1009s
	All	Participation: General level/quality of participation in all course activities	Individual	10 %	CGSC Form 1009c

** Assessed by participating Mock SAG Members